

DF20SC9M

Schottky Barrier Diodes
90V, 20A

Feature

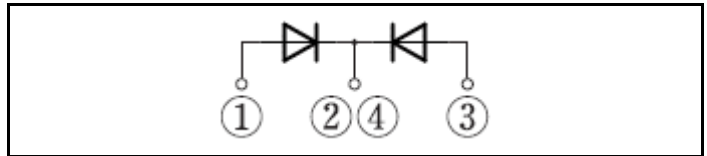
- SMD
- High Recovery Speed
- Pb free terminal
- RoHS:Yes

OUTLINE

Package (House Name): STO-220
Package (JEITA Code): SC-83 similar



Equivalent circuit



Absolute Maximum Ratings (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings	Unit
Storage temperature	T _{stg}		-40 to 150	°C
Junction temperature	T _j		150	°C
Repetitive peak reverse voltage	V _{RRM}		90	V
Repetitive peak surge reverse voltage	V _{RRSM}	Pulse width 0.5ms, duty=1/40	100	V
Average forward current	I _{F(AV)}	50Hz sine wave, Resistance load, Rating for each diode I _{F(AV)} /2, Tc=111°C	20	A
Surge forward current	I _{FSM}	50Hz sine wave, Non-repetitive, 1cycle, Peak value, T _j =25°C	200	A
Repetitive peak surge reverse power	P _{RRSM}	Pulse width 10μs, T _j =25°C, per diode	660	W

* :See the original Specifications

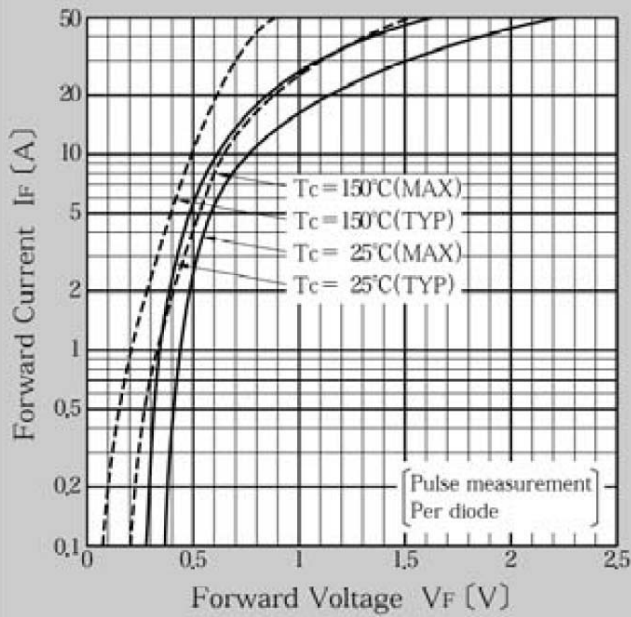
Electrical Characteristics (unless otherwise specified : Tc=25°C)

Item	Symbol	Conditions	Ratings			Unit
			MIN	TYP	MAX	
Forward voltage	V _F	I _F =10A, Pulse measurement, per diode			0.75	V
Reverse current	I _R	V _R =90V, Pulse measurement, per diode			10	mA
Total capacitance	C _t	f=1MHz, V _R =10V, per diode		370		pF
Thermal resistance	R _{th(j-c)}	Junction to case			1.6	°C/W

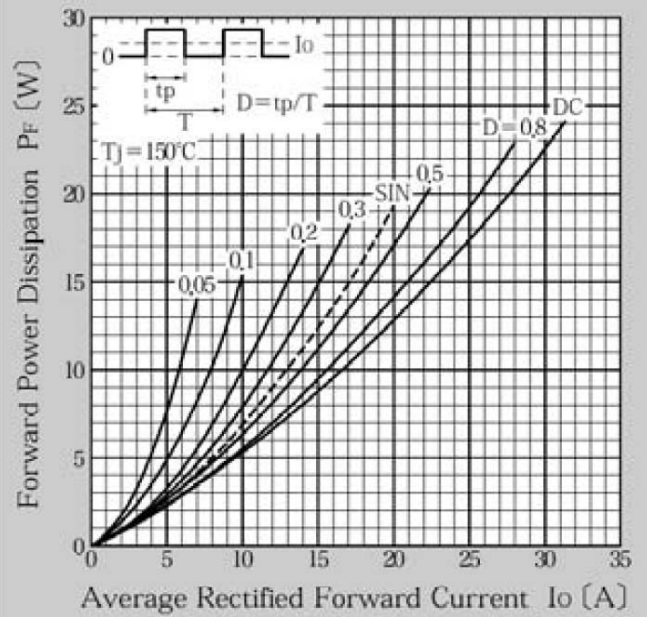
* : See the original Specifications

CHARACTERISTIC DIAGRAMS

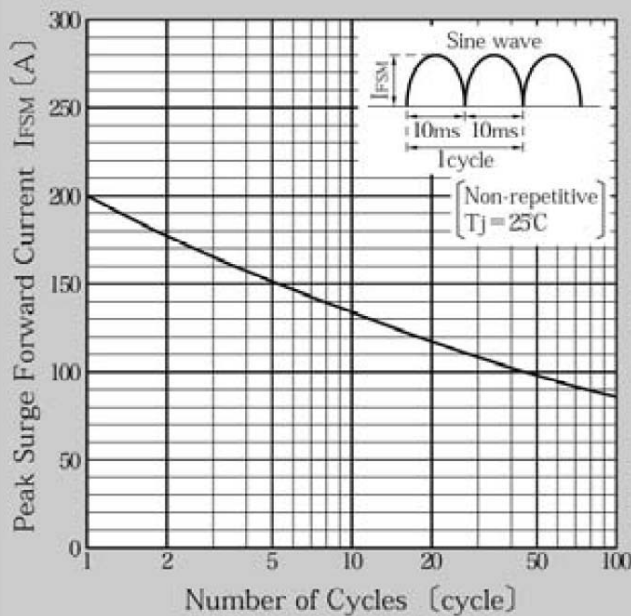
Forward Voltage



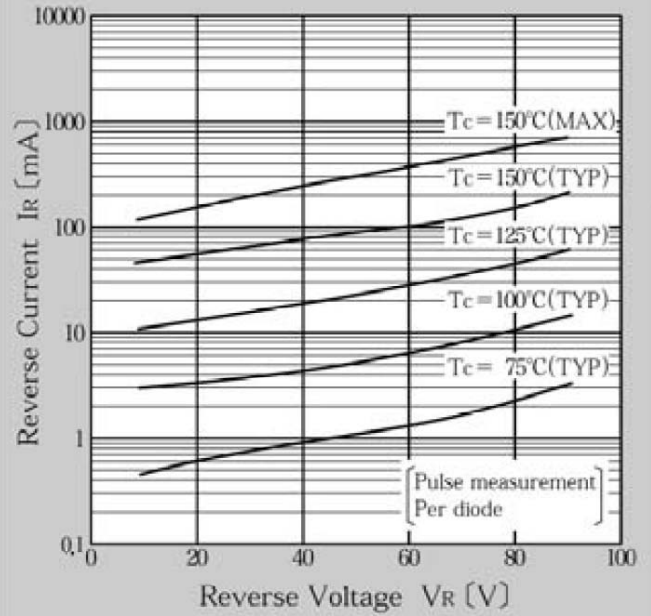
Forward Power Dissipation



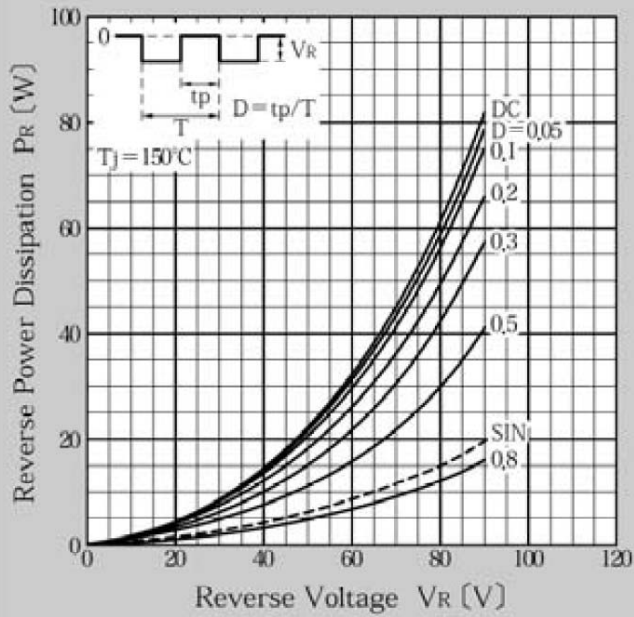
Peak Surge Forward Current Capability



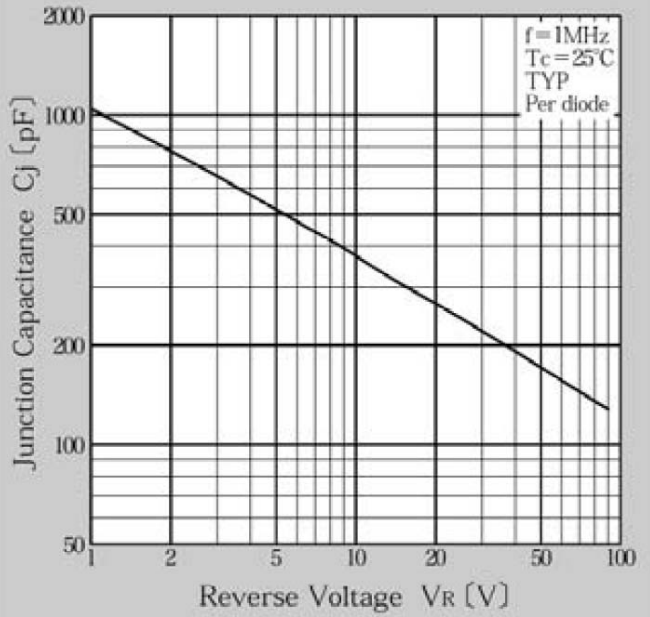
Reverse Current



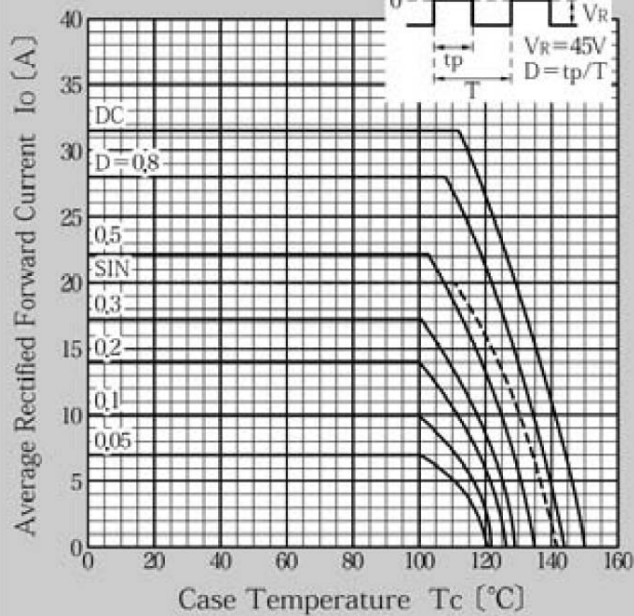
Reverse Power Dissipation



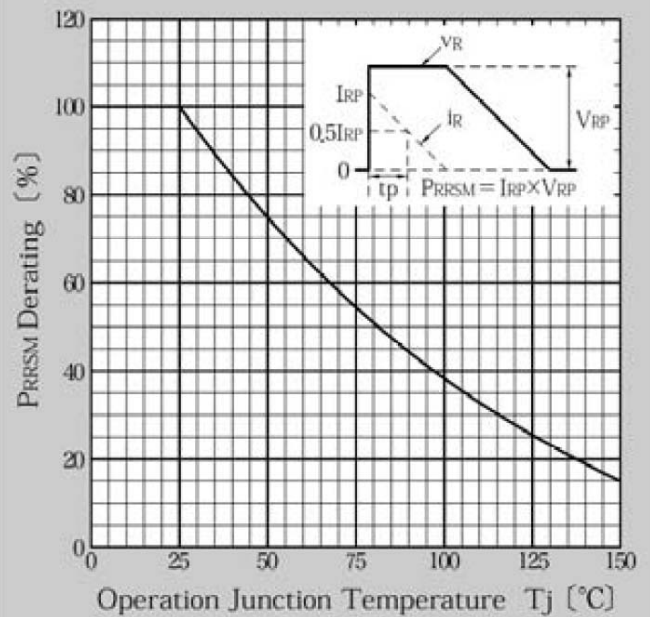
Junction Capacitance



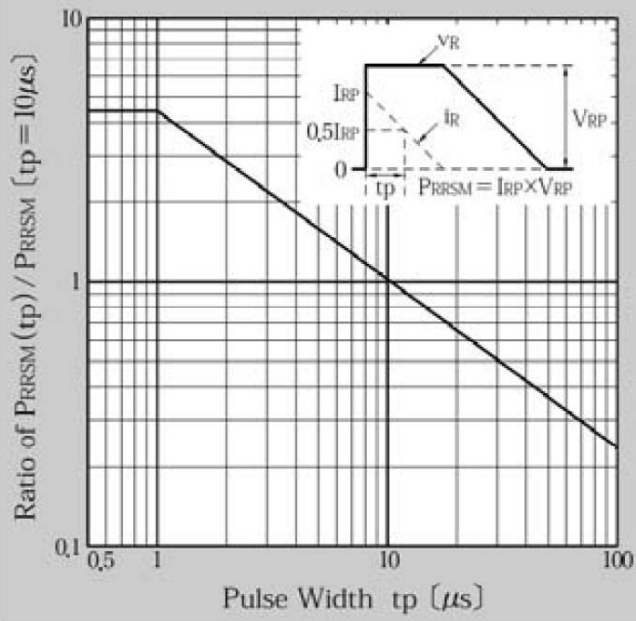
Derating Curve T_c - I_o



Repetitive Surge Reverse Power Derating Curve

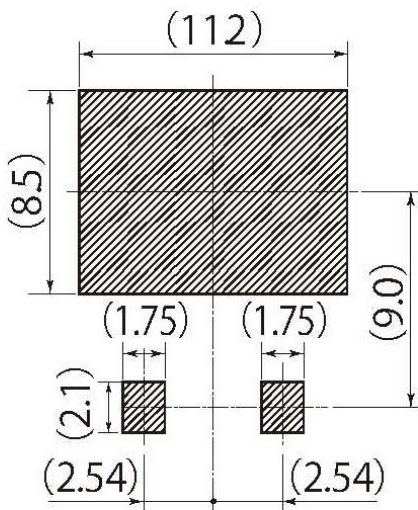
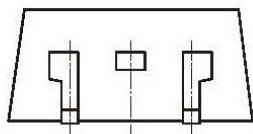
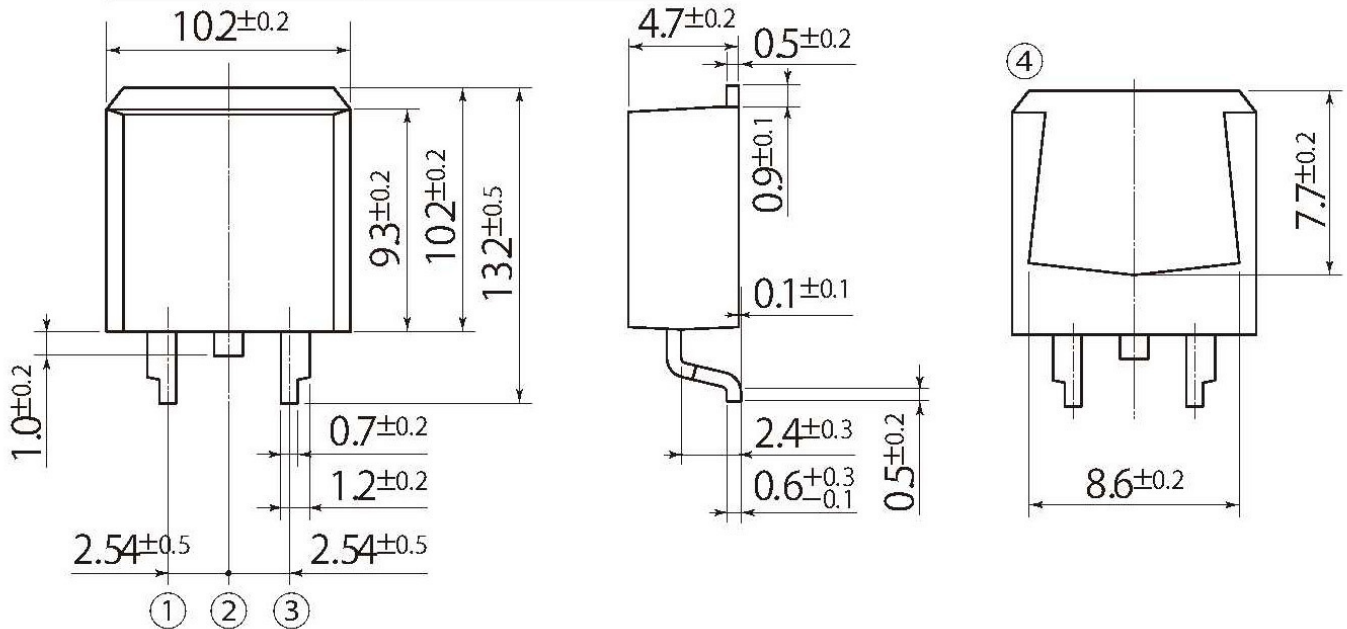


Repetitive Surge Reverse Power Capability



H1

JEDEC Code	-
JEITA Code	SC-83 similar
House Name	STO-220



Referential Soldering Pad

• Optimize soldering pad to the board design and soldering condition.

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